

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

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In the Matter of:

THE JOINT APPLICATION OF THE BATH)
COUNTY WATER DISTRICT OF BATH COUNTY,)
KENTUCKY, AND THE SHARPSBURG WATER)
DISTRICT OF BATH AND NICHOLAS COUNTIES)
KENTUCKY, FOR A CERTIFICATE OF PUBLIC)
CONVENIENCE AND NECESSITY, AUTHORIZING) CASE NO. 8896
AND PERMITTING THE BATH COUNTY WATER)
DISTRICT TO CONSTRUCT EXTENSIONS AND)
IMPROVEMENTS TO ENABLE THE BATH COUNTY)
WATER DISTRICT TO SELL AN ADEQUATE)
SUPPLY OF TREATED WATER TO THE SHARPS-)
BURG WATER DISTRICT)

O R D E R

The Sharpsburg Water District ("Sharpsburg") filed an application on September 6, 1983, for approval of adjustments to its water service rates, authorization to construct a \$1,194,250 waterworks improvements project, approval of its financing for the proposed project and approval of a proposed plan for refinancing its outstanding bonds. Sharpsburg's project financing includes \$4,000 from applicants for service in the proposed project area, a loan of \$171,000 from the Farmers Home Administration ("FmHA") at 7 1/8 percent annual interest, a loan of \$18,000 from the FmHA at 11 3/8 percent annual interest, a grant of \$485,500 from the FmHA, a grant of \$465,750 from the Department of Housing and Urban Development and a grant of \$50,000 from Area Development Funds. Sharpsburg will issue waterworks revenue bonds as security for the FmHA loans. The repayment period will be 40 years.

An amended application filed January 5, 1984, identified the Bath County Water District ("Bath County") as a joint applicant in this matter, described certain improvements to Bath County's distribution system as necessary for the delivery of water to Sharpsburg and defined the cost thereof as Sharpsburg's "tap-fee" to Bath County. The approval of a Water Purchase Agreement was also requested by the Amended Application.

The proposed improvements will make Bath County the source of potable water for Sharpsburg. Pumping, storage and transmission main improvements will be made to the Bath County system. Metering, pumping, storage and transmission main improvements will be made to the Sharpsburg system.

Plans and specifications for these improvements as prepared by Mayes, Sudderth & Etheredge, Inc., Consulting Engineers of Lexington, Kentucky, ("Engineer") have been approved by the Division of Water of the Natural Resources and Environmental Protection Cabinet.

The rates proposed by Sharpsburg would produce additional annual revenues of \$18,726, an increase of 26.7 percent over test period revenues. However, based on normalized test year revenue, the actual increase requested would be \$15,885, an increase of 22.7 percent. Based on the determination herein, the revenues of Sharpsburg will increase by \$15,761 annually, an increase of 22.5 percent.

A hearing was held in the offices of the Public Service Commission, Frankfort, Kentucky, on January 17, 1984. There were no intervenors, and no protests were entered.

COMMENTARY

Sharpsburg is a nonprofit water distribution system organized and existing under the laws of the Commonwealth of Kentucky and presently serves approximately 426 customers in Nicholas and Bath counties, Kentucky.

TEST PERIOD

The Commission has adopted the 12-month period ending June 30, 1983, as the test period for determining the reasonableness of the proposed rates. In utilizing the historical test period, the Commission has given full consideration to known and measurable changes found reasonable.

REVENUES AND EXPENSES

Sharpsburg proposed several adjustments to revenues and expenses in its original application. Sharpsburg's proposed adjustments include the effect that the new customers and the change in its source of water supply will have upon the revenues and expenses of the district. The Commission is of the opinion that the proposed adjustments are generally proper and acceptable for rate-making purposes with the following modifications:

Operating Revenue

In determining its normalized revenue, Sharpsburg applied the new rates requested in this case to an estimated average

monthly water consumption of 5,042 gallons per customer for 12¹ new customers to be added. Since the filing of the original application, it has been determined that the actual number of new customers to be added will be 20.² Therefore, the Commission has increased Sharpsburg's actual test-year operating revenue by \$3,312 to reflect the additional revenue from the new customers at the current rates.

In addition, in calculating its test-period revenue from truck sales, Sharpsburg made an error in determining total test-period revenue from truck sales of \$8,339. At the usage level shown in the billing analysis and the current rate for truck sales, the normalized revenue from truck sales would be \$11,180. Therefore, the Commission has increased Sharpsburg's actual test-year operating revenue by \$2,841 to reflect the normalized revenue from truck sales.

Purchased Water Expense

Sharpsburg projected purchased water expense of \$33,400 to reflect the purchase of its water from Bath County upon abandonment of its treatment plant. Sharpsburg based its projected expense upon the \$1.14 per 1,000 gallons rate included in its water purchase agreement with Bath County and the 12 new customers originally anticipated. As more specifically detailed in the Purchased Water Contract section of this Order, the Commission has

¹ Response, Item No. 8, Commission Order dated September 23, 1983.

² Transcript of Evidence ("T. E."), January 17, 1984, p. 4.

determined that the \$1.14 per 1,000 gallons rate would result in the customers of Bath County subsidizing those in Sharpsburg and has determined the proper rate to be \$1.20 per 1,000 gallons. The Commission has therefore calculated the allowed purchased water cost based upon a purchased water rate of \$1.20 per 1,000 gallons and included the 20 new customers to be added. This results in projected purchased water expense of \$35,819.

Utilities Expense

Sharpsburg proposed an adjustment to decrease its utilities expense by \$6,179 to reflect the savings expected to be realized upon abandonment of its water treatment plant. Sharpsburg has proposed a pro forma level of \$3,000 for utilities expense to reflect the cost of pumping water from Bath County to Sharpsburg.

In its adjustment, Sharpsburg has calculated that the electric power for pumping would be 118.5 KWH per day. The Commission does not concur with Sharpsburg's estimate. In calculating the estimated usage, using the same figures used by Sharpsburg, the Commission's calculations result in electric consumption of 70.7 KWH per day. Therefore, the Commission has calculated the pro forma utilities expense based upon an estimated consumption of 70.7 KWH per day and applied the current rates in effect from its electric supplier, Fleming-Mason RECC. This results in adjusted utilities expense of \$2,272.

Maintenance Expense

During the test period, Sharpsburg incurred an expenditure of \$1,586 to rebuild a motor at the treatment plant, the cost of which was included as an operating expense during the test period. The Commission finds that, with the impending abandonment of the treatment plant, this expense would be a non-recurring cost and should be amortized over a reasonable period of time.

Therefore, the Commission has reduced Sharpsburg's maintenance expense by \$1,586 for rate-making purposes. The Commission finds that 3 years is a reasonable period of time to amortize an expenditure of this nature and has included amortization expense of \$529 to reflect one-third of the total cost of this item.

Depreciation Expense

The actual operating statement of Sharpsburg for the test period reflected depreciation expense of \$8,308. However, Sharpsburg did not include depreciation expense in the calculation of its revised rates requested herein. It is the policy of the Commission to allow depreciation expense for rate-making purposes on the basis of the original cost of the plant in service at the end of the test period less contributions in aid of construction. Sharpsburg's balance sheet reflects that the level of contributions in aid of construction at the end of the test year was \$222,657, which is approximately 46 percent of the total cost of the utility plant in service at test year end. In determining the pro forma depreciation expense, the Commission has utilized the level of plant in service at the end of the test year, exclusive

of contributions in aid of construction and the cost of the facilities to be abandoned, and the 2 percent composite depreciation rate used by Sharpsburg for the test period. This results in depreciation expense on existing facilities of \$2,925.³

In addition, in order to accurately reflect Sharpsburg's pro forma depreciation expense, the Commission has included depreciation expense on the cost of facilities to be added which will be financed through non-contributed funds. The Commission has determined that a composite depreciation rate of 2 1/2 percent is reasonable for the facilities to be added in this project. Therefore, the resulting depreciation expense found reasonable by the Commission for this construction project is \$450.⁴ Therefore, the total allowed depreciation expense including the depreciation on the new facilities is \$3,375.

Insurance Expense

Sharpsburg proposed an adjustment to insurance expense of \$146 to reflect the estimated insurance expense for the new facilities to be constructed. However, Sharpsburg did not propose a

3	Total Plant in Service (6/30/83)	\$415,420
	Less: Land	10,033
	Subtotal	<u>\$405,387</u>
	Less: Contributions	222,657
	: Abandoned Plant	36,480
	Total Depreciable Plant	<u>\$146,250</u>
	Multiply: Composite Rate	2%
	Depreciation Expense Existing Plant	<u>\$ 2,925</u>
4	Non-Contributed Plant Added	<u>\$18,000</u>
	Multiply: Composite Rate	2.5%
	Depreciation Expense-New Plant	<u>\$ 450</u>

downward adjustment to reflect the decrease in insurance expense that should be realized upon the abandonment of the treatment plant. Sharpsburg at this time is unable to estimate the insurance savings that should be realized upon the abandonment of the treatment plant but in the explanation of its proposed adjustment has recognized that there will be a corresponding decrease in insurance expense upon abandonment of the treatment plant.

The Commission is of the opinion that the savings in insurance expense that will be ultimately realized upon abandonment of the treatment plant will essentially offset the increase to insure the new facilities. Therefore, due to the fact that at this time a downward adjustment cannot be determined to reflect the expected savings from abandonment of the plant, the Commission has disallowed Sharpsburg's adjustment herein.

The Commission finds that Sharpsburg's adjusted test period operations are as follows:

	<u>Actual Test Period</u>	<u>Pro Forma Adjustments</u>	<u>Adjusted Test Period</u>
Operating Revenues	\$ 69,974	\$ 6,153	\$ 76,127
Operating Expenses	85,788	<12,099>	73,689
Operating Income	<u>\$<15,814></u>	<u>\$ 18,252</u>	<u>\$ 2,438</u>
Other Deductions	9,175	5,056	14,231
Net Income	<u><u>\$<24,989></u></u>	<u><u>\$ 13,196</u></u>	<u><u>\$<11,793></u></u>

REVENUE REQUIREMENTS

The Commission is of the opinion that the adjusted test-period operating loss is clearly unjust and unreasonable. The Commission finds the debt-service coverage method to be a fair,

just and reasonable method of determining revenue requirements in this case and adequate to allow Sharpsburg to pay its operating expenses, meet its debt service requirements and maintain a reasonable surplus. The Commission finds Sharpsburg's revenue requirement to be \$91,888 based upon a 1.2X debt service coverage which would require an increase in revenue of \$15,761 annually.

OTHER ISSUES

Sharpsburg has requested a certificate of convenience and necessity authorizing it to construct extensions, additions and improvements to its waterworks system. As a part of the construction project, Sharpsburg's treatment plant and other related facilities will be abandoned. It is Sharpsburg's intent to attempt to sell as salvage as much of the treatment plant and related facilities as possible. However, at this time Sharpsburg does not know what the salvage value of the plant in its current condition is, and is therefore unable at this time to determine the gain or loss from the abandonment.

The Commission has the ultimate authority to approve or disapprove abandonments of utility plant by utilities under its jurisdiction. Therefore, it is necessary that, at the time of abandonment by Sharpsburg, it file with the Commission a request for approval of the abandonment including the manner, in detail, in which the facilities in question shall be abandoned and the proposed accounting journal entries to record the abandonment.

Water Purchase Agreement

Sharpsburg and Bath County filed a joint petition, which is included as a part of this case, requesting approval of a water purchase agreement providing for the purchase of water by Sharpsburg from Bath County at a rate of \$1.14 per 1,000 gallons. In response to a request made at the hearing, a cost study was filed detailing the cost which will be incurred by Bath County to deliver water to Sharpsburg. The cost study showed that the proposed rate of \$1.14 per 1,000 gallons is unreasonable in that it is less than Bath County's minimum cost. The Commission is of the opinion that the wholesale water rate should be at least compensatory and allow for cost fluctuation in order to avoid subsidization of the wholesale customer by Bath County's residential and commercial customers.

Rate Design

Sharpsburg proposed to establish minimum bills and usage levels for 1-inch and 2-inch meters with the minimum usage of 10,000 gallons for both. Information filed by Sharpsburg on February 2, 1984, shows that Sharpsburg used averages of the minimum, average maximum and maximum instantaneous capacities of the 1-inch and 2-inch meters and the actual corresponding capacities of the 5/8-inch meter to compute a quotient, which was then multiplied by the present usage level for 5/8-inch x 3/4-inch meters to arrive at the proposed usage level for the larger meters. This information also shows that the actual capacities of

1-inch and 2-inch meters differ substantially. Therefore, the Commission is of the opinion that minimum bills and usage levels should be established separately for each size meter to more accurately reflect water distribution capacities, customer demand and associated cost.

Sharpsburg proposed to increase the rates charged its residential customers and its school customer, but proposed no increase for truck sales. The increases proposed for the various rate blocks range from approximately 6 percent to 119 percent. Sharpsburg's engineering witness, Mr. David Scott Taylor, testified that several rate schedules were proposed which would produce the required revenue, then one of these was selected as the most appropriate.⁵ No cost studies, comparisons, surveys or other factors were considered in arriving at the proposed rate schedule. The proposed rates place the major burden of the requested increase on the average residential user.

The Commission is of the opinion that the proposed rate schedules are unfair, unjust and unreasonable and should be denied. Further, the Commission is of the opinion that the rates in Appendix A are the fair, just and reasonable rates to be charged in that they will produce the required revenue and will provide a more equitable distribution of the necessary increase.

⁵ T.E., pp. 46-47.

Other Charges

Sharpsburg proposed to increase its connection fee from \$175 to \$350. The cost justification filed by Sharpsburg⁶ shows that the actual average cost of connection is \$280. Mr. Taylor testified that the higher charge was proposed because it was anticipated the cost of making a connection would increase.⁷ The Commission is of the opinion that such anticipated increase in costs is not known and measurable and that the excess over actual average cost should be disallowed.

Sharpsburg proposed to increase its reconnection charge from \$6.00 to \$15.00 and to establish a delinquent account charge of \$3.00. The Commission is of the opinion that these are reasonable charges which would enable Sharpsburg to recoup costs to the utility from those for whom the costs are incurred.

Sharpsburg also proposed to establish a flat rate meter deposit of \$50. The cost data provided by Sharpsburg⁸ shows that labor costs, 2 months' average bills and a disconnect/reconnect charge are included in this amount. 807 KAR 5:006, Section 7, provides that when bills are rendered monthly, a utility may require a cash deposit to secure payment of bills not to exceed 2/12 of the estimated annual bill of the customer or applicant. Inclusion of labor and reconnect/disconnect charges is not appropriate under this regulation.

6 Exhibit 10.

7 T.E., pp. 42-43.

8 Exhibit 10.

FINDINGS AND ORDERS

The Commission, after consideration of the application and evidence of record and being advised, is of the opinion and finds that:

1. Public convenience and necessity require that the construction proposed in the application and record be performed and that a certificate of public convenience and necessity be granted.

2. The proposed improvements to the Sharpsburg water system include a new 100,000-gallon water storage tank, repairs to 2 existing water storage tanks, a pumping station, a master meter, 2 altitude control valves, 9 air release valves, 6 fire hydrants, 20 residential service connections, about 8 miles of 8-inch water main and miscellaneous appurtenances.

3. The proposed improvements to the Bath County water system include repairs to an existing water storage tank, the renovation of two pumping stations, the construction of about 3.6 miles of 6-inch water main and miscellaneous appurtenances.

4. The low bids received for all of the proposed improvements totaled \$628,145 which will require about \$1,194,250 in project funding after allowances are made for fees, contingencies and other indirect costs, and the additional construction proposed by the Engineer after receiving bids under the final estimates.

5. Sharpsburg and Bath County should obtain approval from the Commission prior to performing any additional construction.

6. Any deviations from the construction herein approved which could adversely affect service to any customer should be subject to the prior approval of this Commission.

7. The proposed borrowing of \$189,000 is for lawful objects within the corporate purposes of Sharpsburg, is necessary and appropriate for and consistent with the proper performance of services to the public by Sharpsburg, and will not impair its ability to perform these services.

8. The financing secured by Sharpsburg for this project will be needed to pay for the work herein approved. Sharpsburg's financing plan should, therefore, be approved.

9. Sharpsburg should file with the Commission duly verified documentation which shows the total costs of construction including all capitalized costs (engineering, legal, administrative, etc.) within 60 days of the date that construction is substantially completed.

10. Sharpsburg's contract with its Engineer should require the provision of full-time resident inspection under the general supervision of a professional engineer with a Kentucky registration in civil or mechanical engineering. The supervision and inspection should insure that the construction work is done in accordance with the contract plans and specifications and in conformance with the best practices of the construction trades involved in the project.

11. Sharpsburg should require the Engineer to furnish a copy of the record plans and a signed statement that the

construction has been satisfactorily completed in accordance with the contract plans and specifications within 60 days of the date of substantial completion of this construction.

12. A 5/8-inch x 3/4-inch meter should be the standard customer service meter for all new customers and should be installed at all points of service unless the customer provides sufficient justification for the installation of a larger meter.

13. Sharpsburg should file with the Commission a copy of all contractual agreements for the provision of services or the purchase of services which are subject to the approval of this Commission.

14. The rates in Appendix A are the fair, just and reasonable rates for Sharpsburg in that they will produce gross annual revenue of \$91,888. These revenues will be sufficient to meet Sharpsburg's operating expenses found reasonable for rate-making purposes, service its debt and provide a reasonable surplus.

15. The rates proposed by Sharpsburg would produce revenue in excess of that found reasonable herein and should be denied.

16. At the time of abandonment of its treatment plant and related facilities, Sharpsburg should file with the Commission its request for approval of the abandonment including the manner, in detail, in which the facilities will be abandoned and the proposed accounting journal entries to record the abandonment.

17. The rate proposed in the Water Purchase Agreement is unfair, unjust and unreasonable and should be denied.

18. The fair, just and reasonable rate to be charged by Bath County to Sharpsburg is \$1.20 per 1,000 gallons.

19. The information filed by Sharpsburg does not justify the same minimum usage level for both 1-inch and 2-inch meters. This proposal should be denied, and separate minimum usage levels and bills should be established for each size meter.

20. The connection fee proposed by Sharpsburg is excessive and should be denied.

21. The meter deposit proposed by Sharpsburg is unfair, unjust and unreasonable and should be denied. Sharpsburg should establish a deposit policy in accordance with 807 KAR 5:006, Section 7.

22. The reconnection and delinquent account charges proposed by Sharpsburg are fair, just and reasonable and should be approved.

23. The rates and charges in Appendix A are the fair, just and reasonable rates and charges for services to be provided to the customers of Sharpsburg.

IT IS THEREFORE ORDERED that Sharpsburg and Bath County be and they hereby are granted a certificate of public convenience and necessity to proceed with the waterworks improvements projects set forth in the plans and specifications of record herein.

IT IS FURTHER ORDERED that Sharpsburg and Bath County shall obtain approval from the Commission prior to performing any additional construction.

IT IS FURTHER ORDERED that any deviations from the approved construction which could adversely affect service to any customer shall be subject to the prior approval of this Commission.

IT IS FURTHER ORDERED that Sharpsburg's plan for financing its construction work in the amount of \$1,194,250, including 40-year loans of \$171,000 at 7 1/4 percent annual interest and \$18,000 at 11 3/8 percent annual interest from the FmHA, be and it hereby is approved.

IT IS FURTHER ORDERED that Sharpsburg shall file with the Commission duly verified documentation which shows the total costs of construction herein certificated including all capitalized costs (engineering, legal, administrative, etc.) within 60 days of the date that construction is substantially completed.

IT IS FURTHER ORDERED that the contract between Sharpsburg and its Engineer shall require the provision of full-time resident inspection under the general supervision of a professional engineer with a Kentucky registration in civil or mechanical engineering. This supervision and inspection shall insure that the construction work is done in accordance with the contract plans and specifications and in conformance with the best practices of the construction trades involved in the project.

IT IS FURTHER ORDERED that Sharpsburg shall require the Engineer to furnish to the Commission a copy of the record plans and a signed statement that the construction has been satisfactorily completed and done in accordance with the contract plans and specifications within 60 days of the date of substantial completion of the proposed construction.

IT IS FURTHER ORDERED that a 5/8-inch x 3/4-inch meter shall be the standard customer service meter for all new customers

and shall be installed at all points of service unless the customer provides sufficient justification for the installation of a larger meter.

IT IS FURTHER ORDERED that Sharpsburg shall file with the Commission a copy of all contractual agreements for the provision of services or for the purchase of services which are subject to the approval of this Commission.

IT IS FURTHER ORDERED that, at the time of abandonment of its treatment plant and related facilities, Sharpsburg shall file with the Commission its request for approval of the abandonment including the manner, in detail, in which the facilities will be abandoned and the proposed accounting journal entries to record the abandonment.

IT IS FURTHER ORDERED that the wholesale water rate proposed to be charged by Bath County to Sharpsburg be and it hereby is denied and that the rate of \$1.20 per 1,000 gallons be and it hereby is approved, effective for services rendered on and after the date of this Order.

IT IS FURTHER ORDERED that the minimum bills and usage levels for 1-inch and 2-inch meters, the connection fee and the meter deposit proposed by Sharpsburg be and they hereby are denied.

IT IS FURTHER ORDERED that the delinquent account charge and the reconnection charge proposed by Sharpsburg be and they hereby are approved.

IT IS FURTHER ORDERED that the rates proposed by Sharpsburg be and they hereby are denied.

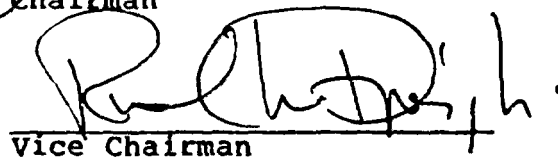
IT IS FURTHER ORDERED that the rates and charges in Appendix A be and they hereby are approved effective for services rendered on and after the date of this Order.

Nothing contained herein shall be deemed a warranty of the Commonwealth of Kentucky, or any agency thereof, of the financing herein authorized.

Done at Frankfort, Kentucky, this 8th day of May, 1984.

PUBLIC SERVICE COMMISSION


Chairman


Vice Chairman


Commissioner

ATTEST:

Secretary

APPENDIX A

APPENDIX TO AN ORDER OF THE PUBLIC SERVICE COMMISSION IN CASE NO. 8896 DATED 5/8/84

The following rates and charges are prescribed for customers served by Sharpsburg Water District. All other rates and charges not specifically mentioned herein shall remain the same as those in effect under authority of the Commission prior to the effective date of this Order.

5/8-inch X 3/4 inch meter

<u>Gallorage Block</u>	<u>Rate</u>
First 2,000 gallons	\$11.00 Minimum
Next 3,000 gallons	2.05 per 1,000 gallons
Next 5,000 gallons	1.70 per 1,000 gallons
Over 10,000 gallons	1.40 per 1,000 gallons

MINIMUM BILLS*

<u>Meter Size</u>	<u>Minimum Usage</u>	<u>Minimum Bill</u>
5/8-inch X 3/4-inch	2,000 gallons	\$11.00
1-inch	5,000 gallons	17.15
2-inch	16,000 gallons	34.05

*All usage in excess of the minimum shall be billed according to the rate schedule for 5/8-inch X 3/4-inch meters.

SCHOOLS

<u>Gallorage Block</u>	<u>Rate</u>
First 50,000 gallons	\$85.00 Minimum
Over 50,000 gallons	1.40 per 1,000 gallons

TRUCK SALES

All Usage	\$ 3.00 per 1,000 gallons
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OTHER CHARGES

Connection Fee (Tap-on)	\$280.00
Reconnection Charge	15.00
Delinquent Account Charge	3.00

Deposit Policy

The utility may require from any customer or applicant for service a minimum cash deposit or other guaranty to secure payment of bills of an amount not to exceed two-twelfths (2/12) of the estimated annual bill of such customer or applicant, where bills are rendered monthly or an amount not to exceed three-twelfths (3/12) of the estimated annual bill of such customer or applicant where bills are rendered bimonthly or an amount not to exceed four-twelfths (4/12) of the estimated annual bill of such customer or applicant where bills are rendered quarterly.